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ABSTRACT

The study assessed the effects of home-country education on the occupational integration of a sample of 82 male immigrants from Spanish American countries in the District of Columbia. The approach was to conceive of the occupational integration of immigrants as a specific case of status attainment. A model of occupational integration described by status variables was tested by path analysis. The variables, in order of importance, which had the greatest direct effect on the current United States occupational status were: (1) first United States occupational status, (2) first home occupation, and (3) education (attained in the home countries). When English proficiency was added to the model, education no longer had a significant direct effect on current occupation. Thus, home-country education is related to occupational integration through first home occupation and English proficiency. It was concluded that the more immediate concerns of previous occupational experience and English proficiency dominated the immigrant job market "negotiations" while education had an indirect influence. Models of status attainment for the sample and non-immigrant population were also compared. (Author/EA)

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EDUCATION AND THE OCCUPATIONAL INTEGRATION OF SPANISH AMERICAN IMMIGRANTS

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ABSTRACT

EDUCATION AND THE OCCUPATIONAL INTEGRATION OF SPANISH AMERICAN IMMIGRANTS

The objective of this study is to assess the effects of home-country education on the occupational integration of a sample of eighty-two male immigrants from Spanish American countries in the District of Columbia. The approach is to conceive of the occupational integration of immigrants as a specific case of status attainment. A model of occupational integration described by status variables was tested by path analysis. First U. S. occupational status, first home occupation and education (attained in the home countries), in order of importance, affect current U. S. occupation. When English proficiency is added to the model, education no longer has a significant direct effect on current occupation. Thus, home-country education is related to occupational integration through first home occupation and English proficiency. It is concluded that the more immediate concerns of previous occupational experience and English proficiency dominate the immigrant job market "negotiations" while education has an indirect influence. Models of status attainment for the sample and non-immigrant population are also compared.

EDUCATION AND THE OCCUPATIONAL INTEGRATION OF SPANISH AMERICAN IMMIGRANTS

Introduction

The purpose of this study is to assess the effects of home-country educational attainment on the occupational integration of immigrants in the United States. The focus is on the role of education in immigrant absorption because of the dependence of the U. S. occupational structure on an educated work force. Immigrants arriving in the United States nowadays enter into a highly complex society based on an advanced technology. They will compete for jobs against a labor pool of highly educated native workers. This contrasts sharply with the less-developed society at the beginning of this century--the period of greatest immigration--which had an almost insatiable capacity for laborers, no matter that many were illiterate and unschooled, to work in raw-material industries and sweat shops and to serve as human conveyor belts in burgeoning factories. It is expected, that the educational background of present-day immigrants, even those not part of the "brain-drain," will be a significant factor in the occupation integration process.

The major question is: What part does education play in the occupational integration of immigrants? Three sub-problems are posed: Is educational attainment among the significant factors

in the occupational integration of immigrants? How important is education compared to other possible factors? What is the mediating mechanism by which the effects of education are transmitted to occupational status?

The investigation of the integration of immigrants can benefit from the progress which has been made in research on the status attainment process in general. Occupational integration can be equated to occupational status attainment and the methodology of status attainment can be applied to the special case of the immigrant sub-population. Hence, this study makes use of path analysis, the primary methodology of status attainment research, to investigate the role of educational attainment in the occupational integration of a sample of immigrants from South American countries who are residing in the District of Columbia.

Thoeretical Rationale

Haller and Portes define "status attainment processes" as "those sets of events by which individuals come to occupy their positions in the social hierarchies of wealth, power and prestige" (1973: 54). Although there is probably one predominating process of status attainment in a society,

different subgroups have unique processes and among societies the predominating process will differ (Haller and Portes, 1973:54). The study of the status attainment process of immigrants is an example of a unique pattern of events which determine status for a subgroup.

In modern societies, status is considered multidimensional since it can be decomposed into income and wealth, social status, occupational status, and educational status (Svalastoga, 1965: 9). Nevertheless, as Haller and Portes note, occupational status encapsulates most succinctly the overall status of an individual 1973:54). Occupational status hierarchies are most efficiently and effectively operationalized by using an estimate of occupational prestige based on Duncan's socioeconomic index of occupations (Duncan, 1961: Appendix B). There is a remarkable degree of agreement on the prestige ratings of occupations among samples drawn from different countries (Hodge, Treiman, and Rossi, 1966), so there is justification for using Duncan's index in a comparative study.

The attainment process, then, traces the life histories of individuals as they pass through a sequence of status positions which ultimately lead to an occupation at a given point in time. This ultimate status is said to be "determined" by the previous status positions. Some of these positions are more "important" than others because they make a greater contribution to the determination of the dependent variable. Furthermore, intervening variables which mediate some or all of the effects of one variable on another are "mechanisms" of status transmission (Duncan, Featherman and Duncan, 1972:4-5).

Towards the end of identifying the attainment process for the U. S. population, Blau and Duncan posited a basic model which contains only status variables (Blau and Duncan, 1967: 170). The variables are sequenced temporally and thus the causal order is hypothesized: family background, educational attainment, first occupational status and current occupational status. Each variable affects the subsequent variables. Education, having the greatest independent effects, is the most important determinant of current occupational status. A model developed on a population of Wisconsin high school graduates, hence it has been dubbed the "Wisconsin" model, elaborates on the basic model by incorporating psychosocial variables in order to explain the mechanisms of status transmission among the status variables (Haller and Portes, 1973; Sewell and Hauser, 1975). The "psychological" variables are educational and occupational aspirations and significant others' influence while performance variables are mental ability and school grades.

The two types of models--the basic status model and the psychosocial model--set guideposts for the study of occupational integration of immigrants. Basic status models of the integration process can be hypothesized and tested. Then, psychosocial mechanisms of status transmission can be investigated. Previous research on occupational integration provide the basis for judging the validity and feasibility of this approach.

The research on occupational absorption which most informs this question is Patterson's landmark study of management and workers' perceptions of immigrant workers. Patterson found two major sets of factors affecting the absorption of immigrants in an industrial center on the outskirts of London (1968: 228-229). The most important factors have to do with the demographic and economic conditions which shape the demand curve or economic "pull" of immigrants. These factors "are often external, antecedent and sometimes preconditioning in relation to the process of immigrant absorption in industry" (228). The second set of factors encompasses the micro-structural configuration--i.e., personal attributes, such as social status and value orientations, and the manner of interaction--of managers, native workers and immigrant workers.

The status attainment conceptualization primarily deals with the characteristics of the respondents and perhaps those of persons with his immediate social environment. In this conceptualization, the first set of factos cited above, the external ones, are the macrostructural "givens" which are not generally dealt with in the attainment models. Some elements of the micro-structural situation must also be treated as "givens," such as prejudices of native workers and employers, since they are not controlled. It is these "givens" in a social structure, to the degree that they are non-random, that at least partially account for the unexplained variance (or residual or coefficient of alienation) in path models and other types of regression analysis since the attainment models are limited primarily to characteristics

of the respondents and secondarily to those of significant others.[1] The present study also is circumscribed by this limitation, i.e., only the characteristics of the immigrants are examined.

In regard to the characteristics of immigrants which affect their integration, Patterson concluded from her interviews of employers who hire immigrants that working capacity, or technical skills, was the most crucial factor while a general suitability for a particular working community was a very important secondary consideration (1968: 250). General suitability comprises such attributes of the immigrant as previous industrial and socio-economic experience, social class background, education, attitudes and expectations. Education in itself is important for suitability (other studies in Australia and Canada tend to support this, Johnston, 1965; and Richmond, 1967: Table B.5) and also in its relationship to the other attributes. English proficiency has been singled out by Patterson and others as another vital element for occupational integration (Patterson, 1968: 255; Richmond, 1968: 142-3; Weiermair, 1971: Table 9).

While the purpose here is not to devise a statistical test of Patterson's conclusions, it is clear that the characteristics that are repeatedly mentioned in her interviews with employers converge at points with the variables in the status attainment model. Working capacity seems to be more a result of occupational experience than of specific vocational training or educational background: "Even when an adverse stereotype is created, however, there is often a willingness to make an exception for individuals, particularly if their claim to consideration is backed by a good reference from a British employer or better still,

a local one, or by possession of some verifiable craft credentials" Patterson, 1968: 251). Duncan's socioeconomic index of occupations does not refer to specific skills of an occupation, but it does throw a wide enough net to capture general skills along with a cluster of attitudes, values and norms associated with status. Patterson's working capacity, then, might correspond roughly to the immigrant's succession of occupational statuses. In the same fashion, working suitability coincides more or less with educational attainment and father's occupation (being a measure of social origin). Consequently, the recasting of Patterson's descriptive characteristics into the quantitative status variables of the status attainment approach does not do violence to the basic thrust of her conclusions. Besides, it allows them to undergo further empirical exploration by a different methodology.

The final concern of this discussion has to do with the conceptualization of occupational integration, or economic absorption, as it is commonly referred to, as relative positions in the status hierarchy: the higher the position, the greater the integration in the occupational structure. In the present study, occupational integration is operationalized by equating it with occupational status and measuring it on Duncan's socio-economic index of occupations.

This procedure seems compatible with Patterson's conclusions regarding the process of industrial absorption of immigrants. She defines stages of absorption for the immigrant group as

follows:[2]

1. Accomodation, early phase. Initially there is a high rate of horizontal occupational mobility among immigrants. As they begin to learn their jobs and become good "time keepers", they begin to change jobs less frequently.

2. Accomodation, later phase. Immigrants are able to upgrade their positions within one firm or by finding better employment in another firm. Some immigrants move up on the job as newer arrivals take their places at the bottom. Sometimes ethnic work gangs are formed and absorption halts at this stage (referred to as "pluralistic integration" by Patterson, 1968: 207, 211-214).

3. Assimilation. Immigrants are able to secure promotions into supervisory posts over native workers as they are now able to compete for jobs of greater responsibility and enter into higher management positions. Also, immigrants themselves become employers as owners of their own businesses.

Each stage of absorption of the immigrant group is characterized by a change in the level of acceptance of the newcomers by management and by the native workers. For no matter what talents or work orientations an ethnic group brings to a work force, if the native labor feels threatened and if management fears upsetting its native labor or is blinded by ethnic stereotypes, then a group will never proceed past the stage of accomodation.

In short, immigrants are considered "integrated" into the occupational structure to the extent to which they

are able to compete on more or less equal footing with native workers for jobs marked by responsibility, high pay and supervisory functions; in other words, to the extent to which they are able to compete for higher status jobs. Therefore, occupational integration can be equated to occupational status attainment.

Procedures

Since the industrial absorption of immigrants is a process of status attainment, the procedures and concepts of the status attainment scheme can be applied to its investigation. The methodology of status attainment is principally path analysis, which is in the regression analysis family of statistical methods (for a description, see Duncan, 1972; and Land, 1969).[3] The immigrant's current occupation(1972) in the host country is the dependent variable in the model and is measured on Duncan's SES index (Duncan, 1961), as are all the occupation variables. Patterson's concept of working capacity is treated as previous occupational statuses. Social origin is reduced to father's occupation for purposes of analysis. Education, cited in the literature as important for occupation integration, is measured by highest grade completed. Language proficiency, another factor repeatedly mentioned as important, is a rating based on four levels of combined speaking and reading ability in English. It contrasts with the other variables in that it is not a status variable but a psychological (or better still, performance) one.

A basic model of the occupational integration of immigrants, then, has current U. S. occupational status (CO) as the dependent variable and the following determinant variables: father's occupation (DAD), educational attainment (ED), first home occupation (FHO), last home occupation (LHO), and first U.S. occupation (FUO). These temporal variables will be considered for nonrandom disturbance effects: age, work experience in years (WEX), and year of arrival (YA). The basic model for occupational integration will differ from the basic model of status attainment for native populations in that it will trace the sequence of status positions across distinct sociocultural systems, i.e., from the home-country society to the host country society.

In addition to the basic model, a step will taken towards the elaboration of a psychosocial model by considering the effects of English language proficiency (ENG) when added to the basic status model.

The data was gather through an interview survey of eighty-two male immigrants from South American countries now residing in the District of Columbia and participating in the U. S. labor force.[4] They held permanent resident visas upon arrival and are therefore considered to be voluntary immigrants rather than refugees as are the recent Cuban arrivals. They all have completed their formal education in their home countries.

The sampling procedure aimed at securing a sample stratified by income and density of Spanish-speaking population. Random samples were drawn from eleven census tracts selected for their representation of three categories of mean rent and of the ratio of

Spanish-speaking population to total tract population. The final sample is not significantly different from the 1971 immigrant inflow from Central and South American countries in four broad occupational categories but it is significantly different by country of origin from Spanish American permanent residents reporting addresses in the District of Columbia in 1972, the year of the survey (see Zisman, 1975a: Tables 4.7 and 4.16). Judging by shortfalls of tract quotas, the sample may underestimate somewhat immigrants residing in tracts having low density and high rent.

Results

The basic model is composed of status and temporal variables which are postulated to be in this causal sequence: DAD, AGE, ED, FHO, LHO, YA,[5] WEX, FUO and CO. The intercorrelations of these variables are presented in Table 1.[6] These correlations

TABLE 1

are used to calculate the standardized regression coefficients of the possible path models shown in Table 2. The hypothesized

TABLE 2

paths of the basic model, Model I, are diagrammed in Fig. 1.

Fig. 1

Paths are deleted from Model I if their coefficients do not

meet the criterion of significance at the .10 level.[7] Consequently LHO, AGE and WEX are omitted entirely since their low coefficients are plainly not significant, see equation CO_1 in Table 2. ED does not have a significant direct path coefficient to FUO (see FUO_3 in Table 2) and therefore this path is deleted.[8] Although the coefficient for DAD to CO is significant (see CO_2) it is negative when a positive value would be more likely on theoretical grounds. The skeptism is increased by observing the low and non-significant zero-order correlation of .11 between DAD and CO compared to the significant .41 between DAD and LHO (see Table 1). The conclusion is that this result is probably an artifact of the data rather than an indication that DAD is negatively related to CO when other variables are held constant.[9] According to Fig. 1, ED, FHO and FUO are the status variables with significant direct effects on CO.

The determinant variables differ in the amount of contribution that each makes in the determination of current occupation. Table 3 summarizes these contributions in terms of the percentage of the variance "explained". FUO contributes over half of the explained variance and it has the largest direct and total effects on CO. ED and FHO have almost the same impact on CO: 3.5 per cent and 3.2 per cent of the variance is explained by the direct effects of ED and FHO, respectively. A different picture is drawn when only the home status variables are placed in a structural equation:

Table 3

(1) $CO = .237ED + .408FHO + .024LHO \quad (R^2 = .362)$

Now FHO explains 23.3 per cent of the variance of CO while ED accounts for 11.9 per cent and LHO for one per cent.[10] In

Model I, FUO mediates a large portion of the effects of FHO while it does not mediate any of the effects of ED; thus the full impact of FHO is disguised in the complete model. The conclusion is that FHO has a greater impact on CO than does ED while LHO is the least important of the three.

This finding has special meaning only if it contrasts to what is the normative state of affairs in the determination of CO in native populations. Table 4 compares the structural equation for the sample with equations for the U. S. population and the populations of Monterrey, Mexico, and of four cities in Brazil. This comparison is highly suggestive since the variables of the populations were not measured on the same scales and unstandardized regression coefficients are not available for all the data, which prohibits tests of significance (see below). Nevertheless, with one exception (Volta Redonda), ED has a greater impact on CO than does FO. This is in contradistinction to the finding for the sample.

TABLE 4

A more definitive comparison is rendered by focusing on only the sample and the U. S. population since the variables are measured on the same scale[11] and the data can be converted to unstandardized regression coefficients to avoid misinterpretations resulting from random differences in standard deviations among populations (Blalock, 1971: 145-151). In the following equations, the coefficients are concrete paths (unstandardized regression coefficients) and the .95 confidence intervals are in parentheses:

(2) Sample $CO = .942(\pm.868)ED + .349(\pm.187)FHO \quad (R^2 = .363)$

(3) U.S. Pop. $CO = 3.230ED + .329FO \quad (R^2 = .424)$

The coefficients for FO in the equations are not significantly different in contrast to the significantly lower coefficient for ED in the sample than the one in the population. Interpretations of this finding must take into consideration the lack of significant difference in the zero-order correlations between ED and CO for the sample and population(Zisman, 1975a:124).

The above finding raises the question of whether or not ED would still be less important than FHO in determining occupation if the analysis is limited to the home country. One approach to this question is to examine the regression of LHO on ED and FHO and compare it the regression of CO on the same variables. By noting the coefficients for ED and FHO in the two equations one can determine if their relationship changes. These equations are found in Table 4 and indeed the coefficient for ED is considerably smaller than the coefficient for FHO in both the equations. Hence, ED is less important than FHO regardless of whether CO or LHO is taken as the dependent variable.

The standardized regression equations for the sample in Table 4 are not adequate,however, for drawing conclusions about the decrease or increase of the coefficients for ED and FHO as the dependent variable changes from LHO to CO. Such a comparison must take into account the difference in the standard deviations for LHO and CO. The following equations in unstandardized form do this, the standard errors are in parentheses:

(4) $LHO = .954(.482)ED + .571(.104)FHO \quad (R^2 = .500)$

(5) $CO = .942(.443)ED + .349(.095)FHO \quad (R^2 = .363)$

It would be expected that home variables would affect LHO more strongly than CO. This is certainly true for FHO: for each unit change in FHO, LHO changes by .571 unit and in CO by .349. But in regard to ED, although its coefficient does decrease, it does so only begrudgingly. For each grade completed of education, LHO changes by .954 and CO by .942 unit. The difference is .01, which is miniscule on a scale of zero to 96.

The part played by ED in determining CO can be scrutinized more closely by adding psychosocial variables to the basic status model. English language proficiency (ENG) is a likely "mechanism" of status transfer between ED and CO.[12] To study the effects of ENG, various models were hypothesized and tested using the same procedure as in the derivation of Model I. The result is Model II, diagrammed in Fig. 2. ED no longer has a significant direct effect on CO.[13] FHO mediates 65.7 per cent of the correlation between ED and CO; ENG, 22.1 per cent; YA, 15.4 per cent; and AGE, -3.2 per cent. Thus, FHO is the principal mechanism of status transmission from ED to CO, followed by ENG. In fact, these two variables by themselves are sufficient to reduce the direct effects of ED to below the level of confidence to wit, CO = .104ED + .416*FHO + .212*ENG (*P<.10).

Fig.2

Although YA mediates the effects of ED on CO, it does not do so via a direct relationship with CO. Instead it influences ENG and FUO which in turn affect CO. ED is significantly associated with YA in Model II because earlier arrivals tended to have higher educational attainment than later arrivals when age is corrected for: $r_{ED,YA}$=.203 (P>.05) versus $r_{ED,YA.AG}$=.364 (P<.01).

This relationship between ED and YA obscures the normal tendency for ED and AG to be significantly correlated: $r_{ED,AG}=-.16(P>.05)$ versus $r_{ED,AG.YA} = -.34$ $(P<.01)$.

It should be noted that the significant and postive relationships between the independent and dependent variables in Models I and II do not mean that Hispanos necessarily improve their occupational status by immigrating to the U. S. It simply means that the relative status positions remain intact to a greater degree than one would expect in a random world. In fact, as can be observed from the means for the occupational statuses in Table 1, immigrants tend to decline in overall status. The implications of this in regard to the ED-CO relationship are examined elsewhere (author, 1975b).

Conclusions and Implications

This study assessed the effects of home educational attainment on the occupational integration in the District of Columbia of male immigrant workers from the Spanish-speaking countries of Latin America. The sample comprises eighty-two permanent residents who have completed their formal education in their home countries and were residing in the District of Columbia at the time of the interview survey. The procedure was to formulate and test statistical models by means of path analysis.

The problems posed in the Introduction can now be addressed:

(1) Education attained in the home country is important for the occupational integration of immigrants in the United States. Educational attainment, first home occupation and first U. S.

occupation each contribute to the determination of current U. S. occupational status (the indicator of occupational integration); the contribution of each of these variables is independent of their associations among themselves and with the year of arrival. Father's occupation (a measure of social origins), last home occupation, age and work experience in years were not found to be among the significant determinants of occupational integration when analyzed in conjunction with the other variables.

(2) The most important variable in the determination of occupational integration, i.e., the variable having the greatest direct effect on the current U. S. occupational status, is the immigrant's first occupation in the United States. First U. S. occupation acts as a vehicle for transmitting a portion of the effects from first home occupation to current U. S. occupation but it does not act as such for education. Consequently, first home occupation appears to have no more influence on current occupation than does education. However, if first U. S. occupation is removed from the analysis, leaving only the home country variables, then first home occupation has twice as much influence on current occupation as education, with father's occupation and last home occupation being of little consequence due to the redundancy of their effects in other variables. The sequence of home variables in order of importance takes this form: first home occupation, educational attainment and last home occupation.

Although education has a weaker impact on current occupation than does first home occupation, its impact on occupational status remains remarkably constant from the last home job to the current U. S. job. Thus, the influence of education on occupational integration remains as important as its influence on home occu-

pational attainment. This does not hold for the effects of first home occupation which diminish markedly from last home status to current U. S. status despite its greater importance than education.

(3) A step was taken to identify the mechanism of status transmission from home educational attainment to U. S. occupational integration. Education determines occupational integration through its effects on first home occupation and English language proficiency and its association with age and year of arrival. It does not transmit any effects by way of first U. S. occupation. No significant direct effects from education to current U. S. occupation were found.

The study demonstrates the usefulness of considering occupational integration of immigrants in terms of the status attainment process. Immigrant economic absorption is one of the processes of status attainment, describable by many of the same variables commonly employed in status attainment research. Since cultural assimilation is conditioned by economic integration (J. Spengler cited in Borrie, 1959: 101), a basic strategy in immigrant assimilation research should be to test models of economic integration and then extend these models to embrace indices of cultural assimilation. In a society characterized by pluralism, however, and given the difficulty in agreeing on a definition and a measurement of cultural assimilation, economic integration stands out by far as the most crucial dependent variable in immigrant absorption research.

The status attainment process for immigrants differs in certain critical ways from this process for non-immigrant populations. Immigrants, by breaking the usual succession of jobs due to immigration, lose the advantage of the status which normally accumulates in the course of the occupational history of non-immigrants. For a non-immigrant population, all previous occupations affect the current job; the occupations tend to have stronger effects as they become more proximate to the current job (Featherman, 1971: 302). But in the sample of immigrants, the effects of last home status do not contribute significantly to the determination of current U. S. status, independent of first home job and education. Literature on occupational integration of immigrants naturally assumes the importance of the home occupational experience but it does not anticipate that first home job and education are much more crucial than last home occupation. Thus, if technical skills are the most important determinant of an immigrant's level of integration, as Patterson claims (see above), then it is not necessarily those skills which were employed immediately prior to emigration. The dominance of early home career in occupational integration, as evidenced by the results of the path analysis, is in part due to the tendency of immigrants to attain occupational statuses in the U. S. which approximate their first home statuses. The more highly educated do not recoup even this level of status (author, 1975b).

Typically in non-immigrant populations (there was one exception, see above), education has a greater independent influence on current occupation than does first occupation. For the sample of immigrants, the opposite was true. In view of the similarity in the zero-order correlations between education and current occupation for the sample and the U. S. population, it is concluded that first occupation mediates more of the effects of education in the sample than it does in the population. In fact, in percentage of correlation, the amount mediated comes to 26 per cent for U. S. male workers versus 52 per cent for the sample. Since immigrants tend to regress to the status of early home careers after migrating to the U. S. while non-immigrants tend to progress in status from job to job, the educational advantages accruing in the early careers are more critical for immigrants than for non-immigrants.

Most status attainment research is more concerned with the mediation of status transmission from family background to current status than from education to current status. Jencks, however, introduced a measure of cognitive abilities to intervene between education and occupation (1972: Fig. B-7). Further research is needed to detail more precisely this mechanism at the psychosocial level. In regard to immigrant integration, this present study undertook an analysis of the obvious mediating factor of language proficiency, which is not altogether unrelated to measures of cognitive abilities. For the sample, English language proficiency and first home occupation comprise the transfer mechanism of status from home education to occupational

integration. This could mean that these factors are the crucial forces determining U. S. status and that educational attainment is an indicator of them. It is likely that in the job market of the immigrants educational credentials themselves are not recognized by employers as a valid indication of competence since they are of foreign origin. Perhaps for the majority of immigrants, employers ignore educational background altogether in their concern for identifying skills gained in previous occupations and the ability to function in the English language. This would seem reasonable since most immigrants end up in service and blue collar occupations in which the traditional academic education has little direct application beyond a bare minimum of literacy and numeracy.

Finally, family origin does not affect occupational integration of immigrants while it consistently has an important role in the attainment process of non-immigrant populations (for example, see Lancaster, 1971; Balán et al 1973; Holsinger, 1975; and Blau and Duncan, 1967). It is expected that the immigrant's occupational integration would be less influenced by family origins than would be the status attainment of non-immigrants, for as Duncan, Featherman, and Duncan hypothesize, "the migrant would be a person who had managed to free himself from the influence of his family of orientation and the social circle within which it moves" (1972: 226). While their data does not sustain the hypothesis for native migrants in the U. S., the findings reported here do support it for immigrants: father's

occupation is not significantly correlated with U. S. status while it is with last home status. By emigrating, individuals move out of the range of the gravitational pull of social origins, but this is purchased at the cost of a drop in current status. Clearly, the rewards of immigration are not in occupational status gains but in the gains of material status, that is, in higher incomes and standard of living.[14]

In sum, education is an important factor in the occupational integration of immigrants. It is no less important for the status attainment process in the host country than it is in the home countries. Although education is not as crucial as the first home occupation and the first U. S. occupation, it is more crucial than the last home occupation. Since educational attainment and U. S. occupational status are related by their common association with early home career and English proficiency, education itself is probably not an explicit consideration of the actors in the "negotiations" of the job market. More probably the more immediate concerns of previous occupational experience and the ability to speak English dominate these negotiations.

TABLE 1
CORRELATIONAL MATRIX, MEANS AND STANDARD DEVIATIONS FOR SAMPLE

	DAD	ED	FHO	LHO	FUO	CO	WEX	YA	AGE	ENG	Mean	S.D.
DAD	1.00										33.1	22.7
ED	.46	1.00									8.6	4.3
FHO	.39	.62	1.00								28.6	19.9
LHO	.41	.55	.69	1.00							38.6	20.2
FUO	.07	.35	.48	.44	1.00						17.0	15.1
CO	.11	.50	.57	.44	.71	1.00					23.4	16.6
WEX	-.55	-.30	-.10	.02	.14	.09	1.00				20.8	12.1
YA	.16	.20	.23	.18	.36	.40	.46	1.00			5.2	4.1
AGE	.49	-.16	.31	.11	.24	.21	.95	.56	1.00		37.2	11.4
ENG	.27	.66	.42	.36	.22	.46	-.29	.30	-.22	1.00	2.3	1.1

Levels of significance: r = .22, P<.05, N = 81
r = .28, P<.01, N = 81

TABLE 2

SELECTED STANDARDIZED PARTIAL REGRESSION COEFFICIENTS AND COEFFICIENTS OF DETERMINATION FOR A BASIC MODEL OF OCCUPATIONAL INTEGRATION

Dependent Variables	Predetermined Variables								R^2
	DAD	ED	FHO	LHO	YA[b]	AGE	WE	FUO	
FHO	.139	.558*							.402
LHO_1	.118	.163	.542*						.511
LHO_2	.159*	—	.627*						.496
LHO_3	—	.204*	.563*						.501
FUO_1	-.216*	.107	.268*	.215	.133	.306*	-.191		.364
FUO_2	-.220*	.132	.312*	.207	.193	.126	—		.362
FUO_3	-.219*	.082	.290*	.237*	.269*	—	—		.353
FUO_4	—	—	.282*	.200	.259*	—	—		.316
FUO_5[a]	—	—	.419*	—	.263*	—	—		.295
CO_1	-.141*	.280*	.245*	-.069	.107	.073	.006	.477*	.631
CO_2	-.138*	.247*	.240*	-.052	.151*	—	—	.484*	.628
CO_3[a]	—	.188*	.179*	—	.138*	—	—	.507*	.610

*P<.10

[a]Structural equations of the hypothesized path model

[b]There are no significant coefficients when YA is regressed on any of the status variables.

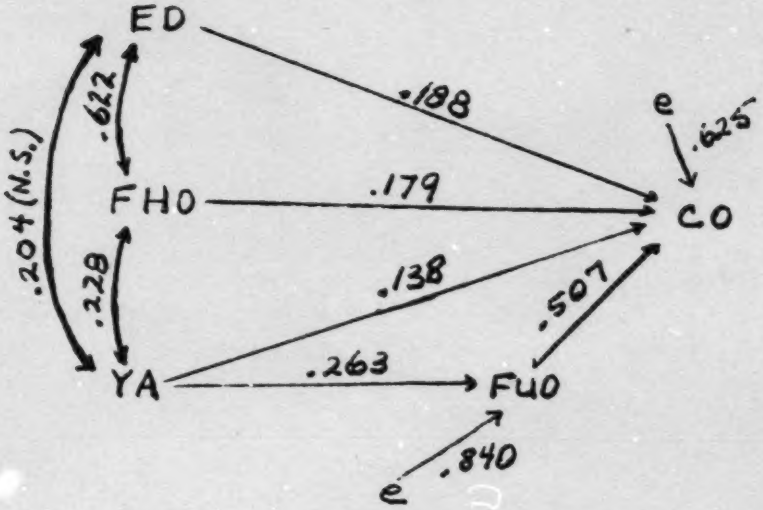

Fig.1.--Path diagram representing Model I of the status attainment process for the sample. Only the significant (P<.10) path coefficients are retained.

TABLE 3
DECOMPOSITION OF THE EXPLAINED VARIANCE OF CURRENT OCCUPATION IN PERCENTAGES OF TOTAL VARIANCE

Effects	Explained Variance: Predetermined Variables ED	FHO	YA	FUO
Direct[a]	3.5%	3.2%	1.9%	25.7%
Shared[b]				
ED		2.1	0.5	3.0
FHO	4.6		1.2	4.4
YA	1.0	1.1		2.5
FUO	—	3.8	1.8	—
Subtotal	5.6	7.0	3.6	9.9
Total[c]	9.1	10.2	5.5	35.6

Total Explained Variance[c]	60.4
Residual	39.6
Total Variance	100.0

[a]Direct effects as a percentage of the variance are found by squaring the path coefficient.

[b]Shared effects, which include indirect effects and the effects associated with a common antecedent variable, are derived from the path analysis formula for calculating the correlation coefficient (See Land, 1969:20).

[c]Total effects explained by the individual variables and total explained variance are calculated by this formula:

$$R^2=\beta_{12}r_{12} + \beta_{13}r_{13} + \beta_{14}r_{14} + \cdots$$

TABLE 4

THE RELATIVE INFLUENCE OF EDUCATION AND FIRST OCCUPATION ON CURRENT OCCUPATION: A COMPARISON OF POPULATIONS, STANDARDIZED PARTIAL REGRESSION COEFFICIENTS

Sample[1]		
	LHO = .203(±.200)ED	+ .563(±.201)FHO
	CO = .244(±.223)ED	+ .418(±.245)FHO
U. S.[2]		
Male Workers	CO = .45ED	+ .29FO
Mexico[3]		
Monterrey Men	CO = .48ED	+ .25FO
Brazil[4]		
Sao Paulo	CO = .51ED	+ .35FO
Rio de Janeiro	CO = .56ED	+ .29FO
Belo Horizonte	CO = .57ED	+ .32FO
Volta Redonda	CO = .28ED	+ .63FO

[1]The .95 confidence intervals are in parentheses. See the text for cautions against using the standardized coefficients instead of the unstandardized ones in cross-population comparisons.

[2]Native non-Negro Men, including men with farm background, 25 to 64 years old, in the experience labor force, March, 1962, calculated from Duncan, Featherman, and Duncan, 1972: Table A.1.

[3]Men only, calculated from Balán, Browning and Jelin, 1973: 104, 291.

[4]Presumedly men and women, Holsinger, 1975: Table 3.

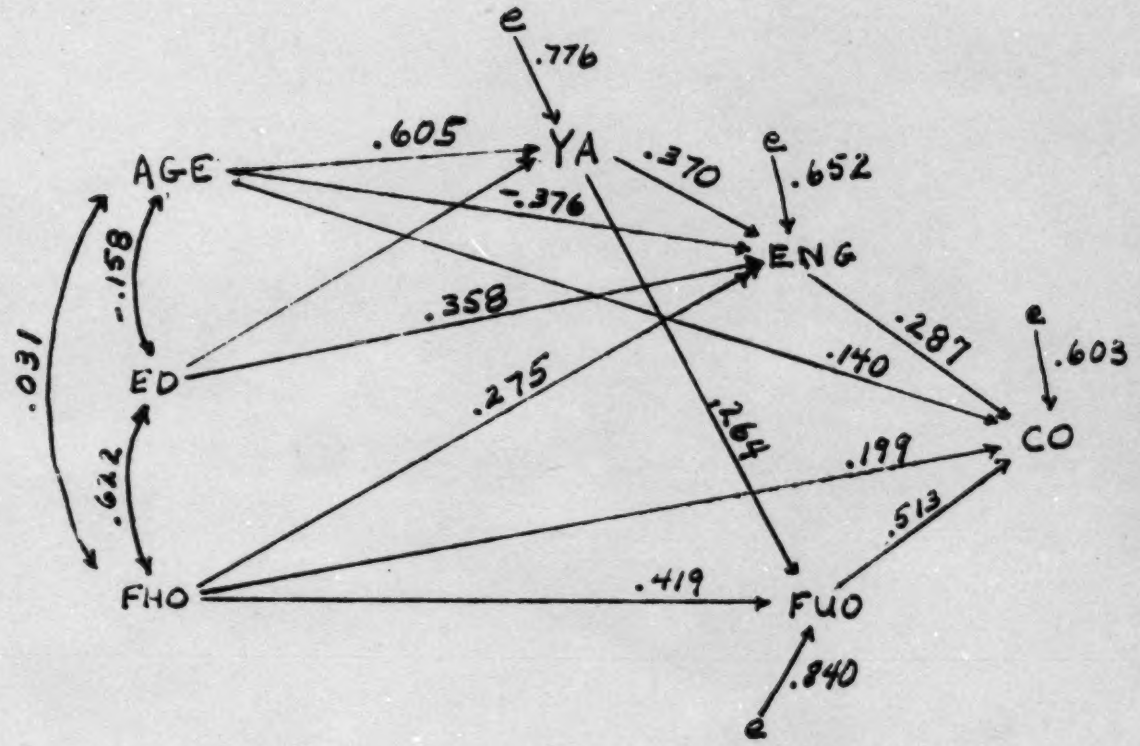

Fig.2.--Path diagram representing Model II of the mechanism of status transmission from education to current occupation. Only the significant path coefficients ($P<.10$) are presented.

Note: Although none of the differences between the observed and the derived correlations is statistically significant, the difference for these correlations for FHO and ENG is .14. This sizeable difference raises the possibility that the residuals for FHO and ENG are correlated. Relaxing the assumption of no association between the error terms results in a correlation of .083 between FHO_e and ENG_e.

FOOTNOTES

[1]As Duncan mentions: "Without commenting on the merits of Jencks's conclusion we note that the "b" in his model--say, dollars of income annually per number of years of schooling completed--is hardly a coefficient that describes merely the behaviour of the ith individual. After all, it is someone else who pays him the income in recompense for his schooling--or, more plausibly, the economic performance that his schooling makes possible" (1975: 166).

[2]This is an incomplete and condensed form of the indices described by Patterson (1968: Table 3). The complete table contains indices for management and local labor, two groups upon which the integration of the immigrant group is contingent. The stages are summarized in my words.

[3]A basic assumption of these methods is that the relationship between the variables is linear. In order to derive the benefits of using path analysis, this assumption is relaxed for the association between education and current occupation. This association is significantly greater for a non-linear model than a linear one.(Zisman, 1975b). Thus, some of the results may underestimate the "true" state of affairs and should be regarded as tentative. It is not uncommon to relax (or ignore) the conditions of regression statistics in order to take advantage of their special qualities as second-degree statistics (for the source of this

argument, see Blau and Duncan, 1967: 145).

[4]One respondent did not work in his home country and therefore is omitted from some of the calculations.

[5]YA could also be positioned between FUO and CO since it can be considered as "time in the United States." When this sequence was tested in the model, no significant direct path was found from FUO to YA. That is, no evidence corroborates the theoretical possibility that first U. S. occupation influences the length of time an immigrant has in the U. S. This interpretation of YA and FUO assumes a YA cohort, which this sample is not, in which "sojourners" would be compared to other immigrants.

[6]The correlation between education and income for the sample is significantly different from zero and not significanly different from the same relationship in the population of U. S. male workers: r = .28. A path model with current U. S. earnings as the dependent variable reveals that none of the home country variables has a direct path to earnings; all their influence is transmitted via FUO and CO. This model is not explored in the text, however, because the correlation for education and earnings depends entirely on three extreme cases which skew the earnings distribution and raise questions about the reliability of the results.

[7]The .10 level of confidence was selected to avoid eliminating large coefficients which are not statistically significant in a relatively small sample. Nevertheless, some large coefficients, .200 in one case, did not meet the criterion. The use of this criterion instead of the more customary .05 one follows Hansen and Haller in their model testing of data from small samples (1973: 272).

[8]This results in overidentification of Model I. However, the derived correlations do not differ significantly or meaningfully from the observed correlations (.017 is the largest difference). Therefore, the assumption of no correlation between the residuals needs not be relaxed (Land, 1969: 35). This is not the case for Model II, below.

[9]Van de Geer contends that negative path coefficients, in such a case as this, are more likely a result of the peculiar interrelationships of the variables (which produce a suppressor effect) rather than any correspondence with reality (1971: 126-127).

[10]It is not the case that FHC is "blocking" the true impact of IHC and that actually--when FHO is not included--LHO is as strong as ED in influencing CO. To wit: CO = .515ED + .080LHC.

[11]Apparently, some respondents on the survey of U. S. male workers reported first jobs that preceded their completion of schooling; in other words, they returned to school after having entered the labor market on a regular basis (Duncan, Featherman, and Duncan, 1972:210-216). The correlation between first job and current job is therefore underestimated. The sample respondents all named first jobs after their highest level of educational attainment. This difference in measurement probably does not affect the comparative findings since there is considerable leeway in the confidence intervals to absorb slight changes in the population coefficients.

[12]English language proficiency was measured at the time of CO. It is hypothesized that ENG is a determiner of CO rather than the converse. This probably oversimplifies the relationship; occupational status can place a person in a position in which his language proficiency will improve. For the purposes of this study, however, it seems reasonable that ENG will mediate the effects of ED on CO.

[13]The magnitude of the beta weight for ED is not significantly different from zero in a sample of 81 elements. There is always the chance that it is the true magnitude. Further investigations will be the arbiters in this regard. The structural equation with ED retained is as follows: CO = .147*AGE + .085ED + .161FHO + .507*FUO + .248*ENG (*P<.10).

[14]Immigrants practically double their median weekly earnings from last home occupation first U. S. occupation: $46 and $86, respectively, adjusted to 1970 dollars and making allowances for cost-of-living differentials between the U. S. and Latin American countries. Current U. S. weekly earnings has a median of $126 in 1970 dollars, see Zisman, 1975a: Table 4.1.

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